

second position by rotation of the cylindrical cam structure; and (c) a rotary actuator for rotating the cylindrical cam structure, said cam structure comprises (1) a cam cylinder having a cam groove which rotates with the rotary actuator, and (2) a support cylinder having a cam follower which support cylinder is attached to the plate and does not rotate, wherein the cam follower is fitted in the cam groove and moves vertically when the cam groove rotates, said support cylinder being provided inside the cam cylinder, wherein the plate, the cam cylinder, the support cylinder, and the rotary actuator are co-axial, wherein

when the plate is at the upper position, the plate divides and seals the upper chamber from the intermediate section and the lower chamber, wherein the upper chamber is at the second pressure, as a second-pressure space, while both the intermediate section and the lower chamber are at the first pressure, as a first-pressure space, to cause a pressure difference exerting downward force on the plate, the cam follower being configured to be locked in the cam groove to withstand the downward force on the plate, whereby wafers at the upper side of the plate are transferred between the first-pressure area and the second-pressure area via the upper chamber, and

when the plate is at the lower position, the plate divides and seals the lower chamber from the intermediate section and the upper chamber, wherein the lower chamber is at the second pressure, as a second-pressure space, while both the intermediate section and the upper chamber are at the first pressure, as a first-pressure space, to cause a pressure difference exerting upward force on the plate, the cam follower being configured to be locked in the cam groove to withstand the upward force on the plate, whereby wafers at the lower side of the plate are transferred between the first-pressure area and the second-pressure area via the lower chamber,

wherein at both the higher and the lower positions of the plate, the first-pressure space is larger than the second-pressure space in the interior of the device.

REMARKS

Claims 8 and 10 have been canceled without prejudice. Claim 1 has been amended to clarify the invention wherein (i) the support cylinder is provided inside the cam cylinder, (ii) the plate, the cam cylinder, the support cylinder, and the rotary actuator are co-axial, and (iii) the first-pressure space is larger than the second-pressure space.

Amendment (i) raises neither the issue of new matter nor new issue, because simply "outside" has been deleted from the previous recitation. Amendment (ii) raises neither the issue of